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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,866	01/10/2002	Randy Wickman	7385-84786	9819

7590

07/21/2003

Welsh & Katz, Ltd.  
Jon P. Christensen  
22nd Floor  
120 South Riverside Plaza  
Chicago, IL 60606

EXAMINER

VALENCIA, DANIEL E

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/044,866

Applicant(s)

WICKMAN, RANDY

Examiner

Daniel E Valencia

DV

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-14 is/are rejected.
- 7) ☒ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This Office Action is in response to Applicant's communication filed July 7, 2003. In accordance with the communication, claims 1 and 9 have been amended. The previous Office Action presented two §102(b) rejections, as anticipated by the Sauter and Tanguay references, respectively. In Applicant's communication, the remarks in conjunction with the amendments distinguish the claimed invention over the Sauter reference; however, the communication does not address the rejection based upon the Tanguay reference. It is deemed that the Applicant agrees with the Examiner's §102(b) rejection of claims 1-5 and 9-14 as being anticipated by Tanguay U.S. Patent No. 5,568,574. Accordingly, this action is made **FINAL**.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanguay U.S. Patent No. 5,568,574. Refer to the appropriate drawings or parts of the specification. Tanguay discloses a modulator-based photonic chip-to-chip interconnections for dense three dimensional multi-chip module integration with all the limitations of the abovementioned claims. Regarding claims 1 and 9, Tanguay

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discloses an apparatus for transmitting an optical communication signal (fig. 9 and 10), such apparatus comprising: an optically transparent substrate (32); an optical array (34), having a plurality of ports, disposed on a surface of the optically transparent substrate, such a plurality of transmission paths of the optical array pass directly through the substrate; and a plurality of optical gratings (254) disposed on a surface of the substrate, such that the transmission paths of the optical array pass substantially through the plurality of optical gratings. Tanguay further discloses that the gratings comprise mechanical or laser etchings (col. 11, lines 45-55), as mentioned in claims 2, 3, 10, and 11. With reference to claims 4 and 12, Tanguay's disclosure shows that the apparatus further comprises at least one locus of etching (fig 9)) in the disposed in the substrate for the plurality of optical ports. Tanguay further discloses that an optical transparent underfill (10) is interposed between the substrate and optical array, such that the plurality of transmission paths of the plurality of optical ports of the optical array pass directly through the optically transparent underfill also comprising a means for receiving (76 and 81) the plurality of optical signals transmitted through the underfill, substrate and optical gratings, from the plurality of optical ports of the optical arrays, as described in instant claims 5 and 13-14.

***Allowable Subject Matter***

Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: As to dependent claim 6, the prior art alone or in combination fails to disclose or render obvious the method of transmitting an optical communications signal as in claim 5 further comprising receiving the plurality of optical signals transmitted through the underfill, substrate and laser etchings into a respective plurality of optical fibers. Although Tanguay discloses the limitations of claims 1-5, the reference fails to teach the coupling of the optical signals to a plurality of fibers. Furthermore, the Tanguay device could not possibly be coupled to fibers in order to transfer respective signals to fibers due to the optical signals being scattered in a variety of different directions (fig. 9).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

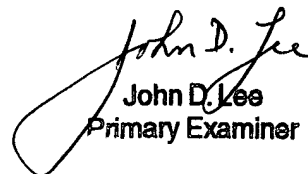
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel E Valencia whose telephone number is (703)-305-4399. The examiner can normally be reached on Monday-Friday 9:30-6:00.

The fax phone numbers for the organization where this application or proceeding is assigned are (703)-308-7724 for regular communications and (703)-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.



DEV  
July 16, 2003



John D. Lee  
Primary Examiner